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News Summary

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A six-year battle over the ownership of laboratory-produced human cells has been settled out of court. Story on Page 3.

Administrators of Ohio's public colleges and universities may soon have to cope with 17-per-cent budget cuts. Story on Page 4.

The president of Wichita State University is fighting charges that his is a "basketball crazy" institution. Story on Page 5.

World-history courses are benefiting from many colleges' return to "core" curricula. Story on Page 7.

No longer will the National Academy of Sciences transmit State Department requests asking universities to restrict foreign scholars' campus activities. Story on Page 9.

The Congressional session beginning this week may be dominated by debate over new cutbacks in education and other social programs. Story on Page 9.

The Education Department has dropped a proposal that could have freed several hundred postsecondary institutions from coverage by civil-rights laws. Story on Page 9.

Controversy seems to be an integral part of selecting a new chairman of the National Endowment for the Humanities. Story on Page 13.

Some scholars are being pressed by publishers to undertake time-consuming revisions of textbooks more frequently. Story on Page 17.

The French government has committed itself to dramatically increased support for research and development. Story on Page 15.

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FIRE AND ICE MIX AT AN IOWA STATE FRATERNITY HOUSE

WIDE WORLD

A 17-hour fire gutted the Phi Gamma Delta fraternity house at Iowa State University after a burning fireplace log lodged in the wall of an ash chute. No students were hurt, but five firemen were treated for exposure after fighting the blaze in temperatures near 20 degrees below zero.

Reagan Plan on Tax Exemptions to Be Fought by Some Legislators and Civil-Rights Leaders

By CHERYL M. FIELDS

WASHINGTON

President Reagan sent Congress a bill last week that would bar tax exemptions for racially discriminatory colleges and schools, but the controversy over the Administration's stand on the issue raged on.

Some civil-rights leaders and lawmakers said they would oppose the legislation, arguing that the Internal Revenue Service already has ample authority to bar exemptions for such institutions, and that the proposed legislation might be weakened by conservative lawmakers in Congress or used as a tool to soften other civil-rights laws.

Meanwhile, until Congress passes legislation—or the courts intervene—Bob Jones University and Goldsboro Christian Schools in North Carolina will have the tax exemptions they gained when the Reagan Administration initially announced it would no longer deny them to racially discriminatory institutions.

Seeking to Blunt Criticism

In sending the bill to Capitol Hill, the President sought to blunt the sharp criticism the Administration received after the Internal Revenue Service announced on January 8 that it was dropping an 11-year-old policy of denying tax exemptions to educational institutions with racially discriminatory policies—because it believed it lacked the legal authority to do so.

The President and virtually all of his top aides acknowledged that the issue had been handled badly and that they had not anticipated the strong public reaction to the I.R.S. move—which critics said would allow valuable tax exemptions for the private "academies" set up in some Southern states to avoid desegregation of public schools.

Mr. Reagan insisted that personally he strongly opposed racial discrimination, and that the issue had been seen by the White House as a "procedural," not a civil-rights, issue—since officials believed the I.R.S. was trying to enforce social policy without having statutory authority to do so.

But Mr. Reagan said he took the blame

Continued on Page 14, Column 1

Poland Adds Strict Rules as Several Campuses Reopen

By SUE MASTERMAN

VIENNA

Polish officials permitted classes to resume at some institutions of higher education last week, but they applied strict measures to assure that rectors, faculty members, and students observed government bans on all political activity.

According to some accounts, Henryk Samsonowicz, the rector of Warsaw University, has been dismissed from the Communist Party as a first step toward removing him from his post. However, his dismissal could not be confirmed and Mr. Samsonowicz was still at the university last week.

Mr. Samsonowicz, a liberal who was popular with both students and faculty members, is said to have opposed the imposition of martial law and has refused to accept some of the conditions laid down by the government for the reopening of the university. According to sources at the university, government officials met with faculty members earlier this month and told them Mr. Samsonowicz had been presented with a list of conditions for the resumption of classes.

The university sources said that the rector had been told that there could be no meetings or demonstrations for political purposes on the campus and that faculty

Continued on Page 16, Column 1

CHRONICLE SURVEY

Inflation-Adjusted Changes in Average Revenue and Expenditures per Student at Colleges and Universities, Fiscal 1979 to Fiscal 1980

	Private institutions							*Public institutions*				
	All institutions	Research universities	Other Ph.D.-granting institutions	Comprehensive institutions	2-year colleges	Selective liberal-arts colleges	Less selective liberal-arts colleges	All institutions	Research universities	Other Ph.D.-granting institutions	Comprehensive institutions	2-year colleges
Educational and general revenue	**+ 0.9%**	**+ 2.0%**	**+ 1.2%**	**– 2.3%**	**– 4.6%**	**+ 0.1%**	**– 2.6%**	**– 2.4%**	**– 2.8%**	**– 2.6%**	**– 3.8%**	**+ 0.4%**
Tuition and fees	– 2.3%	– 2.4%	– 1.0%	– 3.5%	– 3.1%	– 3.4%	– 1.9%	– 3.2%	– 4.1%	+ 0.8%	– 3.6%	– 3.7%
State government	– 5.2%	– 2.3%	– 8.2%	–11.4%	–11.9%	–11.0%	– 7.8%	– 2.9%	– 3.5%	– 4.9%	– 3.9%	+ 0.8%
Federal government	+ 5.8%	+ 4.1%	+10.0%	+ 0.5%	–21.7%	+ 28.4%	+ 4.2%	– 1.1%	– 1.6%	– 1.8%	– 5.8%	+ 6.6%
Local government	—	—	—	—	—	—	—	– 2.0%	+ 5.6%	– 3.0%	– 13.7%	– 0.6%
Private gifts and grants	– 2.6%	– 1.2%	– 4.4%	– 4.7%	– 6.3%	+ 4.9%	–12.4%	– 4.9%	– 1.3%	+ 0.6%	– 6.9%	– 13.1%
Endowment income	+ 1.4%	– 3.0%	+11.7%	+ 4.9%	+ 9.6%	+ 1.3%	+ 6.6%	+ 4.9%	+13.3%	+ 8.3%	+22.1%	– 36.1%
Other	+13.2%	+17.1%	+ 6.1%	+11.6%	+ 5.6%	+16.5%	+ 0.6%	+ 4.2%	– 1.1%	+10.1%	+ 7.7%	+ 5.5%
Auxiliary enterprises	+ 1.3%	+ 5.1%	– 4.8%	– 2.2%	– 4.6%	– 5.7%	– 4.1%	– 1.0%	+ 6.2%	– 6.3%	– 7.1%	– 3.4%
Hospitals and independent operations	– 8.5%	+ 4.1%	+ 7.8%	—	—	—	—	+ 0.9%	+ 6.6%	– 0.8%	—	—
Total revenue	**+ 1.0%**	**+ 2.6%**	**+ 0.9%**	**– 2.3%**	**– 5.1%**	**– 1.1%**	**– 3.7%**	**– 1.9%**	**– 0.9%**	**– 2.9%**	**– 4.4%**	**+ 0.2%**
Educational and general expenditures	**– 0.4%**	**+ 0.4%**	**0.0%**	**– 3.1%**	**– 4.4%**	**– 1.8%**	**– 3.1%**	**– 3.1%**	**– 2.6%**	**– 4.7%**	**– 4.6%**	**– 0.8%**
Instruction	+ 0.1%	+ 1.7%	+ 0.7%	– 4.3%	– 3.1%	– 4.0%	– 3.8%	– 5.0%	– 3.8%	– 6.5%	– 6.1%	– 4.6%
Research	– 0.1%	+ 3.3%	– 5.0%	+ 1.8%	–78.5%	+10.9%	– 0.8%	+ 9.2%	– 0.8%	+ 4.7%	+ 8.7%	+32.0%
Public service	+ 0.8%	+ 1.2%	+ 4.9%	– 8.4%	–32.9%	+ 1.3%	+ 7.6%	+10.5%	+ 2.2%	+29.5%	+ 3.7%	+21.9%
Academic support	– 1.6%	– 1.8%	– 1.2%	– 4.7%	– 5.2%	+ 2.6%	– 0.4%	– 3.5%	– 2.0%	– 7.2%	– 9.5%	+ 4.2%
Student services	– 1.1%	– 1.2%	+ 1.4%	– 2.9%	– 4.4%	– 0.9%	– 2.4%	– 2.5%	– 2.9%	– 9.6%	– 1.0%	+ 1.4%
Institutional support	+ 1.8%	+ 3.6%	– 1.0%	– 3.5%	– 8.5%	+ 1.8%	+ 2.4%	+ 1.2%	+ 0.3%	– 3.8%	+ 3.4%	+ 3.5%
Plant operation and maintenance	– 2.6%	– 4.4%	0.0%	+ 0.9%	+ 0.4%	+ 0.9%	– 1.9%	– 3.6%	– 3.7%	– 3.3%	– 7.4%	+ 1.3%
Auxiliary enterprises	– 1.3%	+ 0.4%	– 2.7%	– 3.0%	– 5.2%	– 4.7%	– 5.0%	+ 0.4%	+ 4.7%	– 3.4%	– 5.0%	+ 2.1%
Hospitals and independent operations	– 8.9%	+ 4.2%	+ 3.6%	—	—	—	—	– 0.1%	+ 2.8%	+ 1.7%	—	—
Total expenditures	**– 0.2%**	**+ 1.1%**	**0.0%**	**– 3.1%**	**– 5.0%**	**– 2.5%**	**– 4.3%**	**– 2.4%**	**– 1.3%**	**– 3.6%**	**– 4.7%**	**– 0.6%**

— Insufficient data or not applicable.

Note: Average changes are adjusted for 12.5-per-cent inflation, as indicated by 1978-79 and 1979-80 averages of the Labor Department's Consumer Price Index, and for full-time-equivalent enrollment in the fall of 1978 and 1979. Survey data are based on information from 133 private institutions and 100 public institutions in a stratified random sample and are part of a continuing series of studies by W. John Minter and Howard R. Bowen. Research for the public institutions' financial data for 1979-80 was underwritten in part by the American Association of State Colleges and Universities, the American Association of Community and Junior Colleges, and the National Association of State Universities and Land-Grant Colleges. A technical report on survey design and sampling statistics will be available later from John Minter Associates. Specific questions may be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: MINTER-BOWEN STUDY OF AMERICAN HIGHER EDUCATION

Ohio Officials Warn Colleges of Possible 17-Pct. Budget Cut

COLUMBUS, OHIO

Ohio's public colleges and universities have been warned by state budget officials that their appropriations may be cut more than 17 per cent in the next six months and 16 per cent the following fiscal year.

Presidents and deans met in emergency weekend sessions to plan how they would deal with the reductions.

The Ohio Board of Regents said the magnitude of the impending reductions in state funds threatened to create a "condition of financial exigency" for higher education in the state.

Chancellor Edward Q. Moulton said the effects of the cuts would range from the "elimination of many essential services to the threat of closure for some institutions."

The financial alarm was sounded by Howard L. Collier, vice-president and treasurer of the Medical College of Ohio at Toledo, who had taken a year's leave of absence to return to his old job as state budget director.

Mr. Collier, who had served as state budget director twice before, took office January 1 and immediately ordered a complete review of the state's revenue estimates.

The estimates had been revised downward by $700-million in September. The revised estimates appeared to hold through October and November, said Mr. Collier's executive counsel, Edgar A. Troyer, but December brought "some dramatic drops in major tax sources."

Also in December, he said, the economic model used to project revenues was revised to take a more conservative approach in its forecasting.

After two weeks of the review ordered by Mr. Collier, "it became apparent that the problems were of much greater magnitude than anyone previously had thought," Mr. Troyer said.

The revised January projection for the period ending June 30, 1983, shows state revenues falling $847.7-million short of the amount appropriated.

Beyond that, the budget office warned that a rising number of welfare cases could push the deficit above the billion-dollar mark.

The State Controlling Board, a key financial committee of the Ohio legislature, was briefed by Mr. Collier and his staff last week on a "mathematical solution" to the problem of the deficit—how appropriations could be reduced to meet constitutional and statutory restrictions that limit spending to expected revenue. Different solutions could be devised by the legislature.

The budget director's solution relies heavily on cuts in funds for higher education.

Of the total expected deficit of $847.7-million, higher education would be asked to make up $204.6-million—24 per cent of the state's total deficit.

The budget cuts are aggravated, higher-education officials said, by their timing. Fiscal 1982, ending next June 30, is already more than half over. The institutions have already spent about half of the money and are committed, through contracts, for much of the rest.

The budget director's plan calls for reduction of $64.6-million in higher education's fiscal 1982 budget.

Such a reduction would mean a cut of 8.9 per cent from the full year's higher-education budget, but to achieve that in six months would mean cutting spending by more than 17 per cent.

For fiscal 1983, the budget office's plan calls for higher education to cut spending by $138-million, or 16.3 per cent of their appropriation.

Detailed, campus-by-campus plans for dealing with the threatened reduction were discussed by administrators, but final decisions awaited an official directive from the budget office, which was expected within a few days.

—JACK MAGARRELL

Higher Education's Hard Times May Have Begun, Survey Shows

The beginnings of the hard times forecast for higher education in the 1980's are apparent in Chronicle Survey reports that have been adjusted for changes in enrollment and inflation.

Over all, inflation-adjusted revenue per student at public colleges and universities dropped 1.9 per cent in fiscal 1980, compared with fiscal 1979.

Private institutions gained an average of 1 per cent in revenue during the same period, thanks primarily to the increased income of the larger universities, but losses were general among private colleges.

Spending per student for instruction, after adjusting for inflation, declined by 5 per cent at public colleges and universities and increased by only 0.1 per cent at private institutions.

Public colleges and universities increased their spending for research by 9.2 per cent, and for cooperative extension programs and other public services by 10.5 per cent, after adjusting for enrollment changes and inflation. Comparable figures for the private institutions showed a decline of 0.1 per cent for research and a gain of 0.8 per cent for public services.

The Chronicle Survey's financial data are based on audited reports from 133 private institutions and 100 public institutions. The data are part of a continuing study of American higher education by W. John Minter, head of an education-research company in Boulder, Colo., and Howard R. Bowen, professor of economics and education at the Claremont Graduate School.

Total operating revenue per student in fiscal 1980, after adjusting for inflation, increased by 2.6 per cent at private research universities and by 0.9 per cent at other private universities granting doctoral degrees.

Declines in adjusted revenue per student at other types of private institutions were: 2.3 per cent at comprehensive colleges (those having 1,500 students or more, a liberal-arts program, and at least one professional program), 5.1 per cent at two-year colleges, 1.1 per cent at the more selective liberal-arts colleges, and 3.7 per cent at the less selective liberal-arts colleges.

At both public and private institutions, revenue per student from tuition and fees lagged behind inflation, showing declines of 3.2 per cent at public institutions and 2.3 per cent at private institutions.

—JACK MAGARRELL

Harvard U. and Washington U. Get Stock Worth $115-Million from Trust

ST. LOUIS

The will of Edward Mallinckrodt, Jr., chairman of the board of Mallinckrodt Inc., a St. Louis chemical company, in 1967 gave 1.5 million shares of the company's stock to Harvard University, his alma mater, and 767,172 shares to Washington University, a hometown recipient of Mallinckrodt family philanthropy.

The stock was not given outright but was held in trust, with the income distributed to Harvard and Washington University for 15 years.

The terms of the trust agreement specified that the stock be turned over to the two universities in January, 1982, which happened to be a time when Mallinckrodt, Inc. was being taken over by another corporation, Avon Products, the cosmetic company.

Avon announced in December that it had agreed to acquire Mallinckrodt for $50 a share. Only a year earlier, a share had been valued at about $30.

The Avon offer boosted the value of Harvard's gift, now to be added to its endowment, to about $77-million, and made Washington University's share worth an estimated $38.3-million.

The $115-million total value of the two universities' Mallinckrodt stock prompted the New York *Times* to say that it was "believed to be the largest single gift in the history of American education."

Some higher-education officials, however, question whether stock given to two universities constitutes a single gift.

Further, when the bequest was made 15 years ago, its value was much lower than the present $50 a share. Even at last year's $30 a share, the total value would have been only about $68-million.

The apparent champion in the heavyweight division of single gifts to higher education is still the $105-million in Coca-Cola Company stock given by Robert W. Woodruff, retired president of the company, to Emory University in February, 1980.

Sometimes mentioned as a contender in the biggest-gift competition is New York University's macaroni money.

In September, 1976, New York University received $115-million from the sale of a macaroni factory. That was not actually a gift because the macaroni business already belonged to the university.

The C. F. Mueller Company of Jersey City, N.J., had been incorporated by alumni and friends of the university in 1947 to manufacture macaroni and contribute all its earnings to the N.Y.U. law school. —JACK MAGARRELL

FACT-FILE

1980-81 Ranking of Research Libraries in U.S., Canada

University libraries†	Rank by overall size‡	Volumes in library	Volumes added	Current serials	Spending for materials*	Spending for salaries*
Harvard U.	1	10,260,571	177,908	95,000	$5,728,552	$11,727,908
Yale U.	2	7,579,121	177,168	58,628	1,622,158	7,473,517
U. of California at Berkeley	3	5,927,773	169,101	104,793	3,890,000	9,700,000
U. of California at Los Angeles	4	4,346,526	111,304	65,788	3,637,295	9,235,283
Stanford U.	5	4,813,393	118,624	46,457	4,043,791	8,627,615
U. of Michigan	6	5,345,918	111,538	59,988	3,764,874	6,976,479
U. of Texas	7	4,702,122	150,041	60,000	4,504,655	6,453,783
U. of Toronto	8	4,623,880	175,570	44,147	3,595,212	9,568,719
U. of Illinois	9	6,091,125	154,302	93,913	3,158,596	6,252,306
Cornell U.	10	4,318,583	101,668	55,206	3,236,211	6,032,089
Columbia U.	11	5,112,559	96,099	59,196	2,785,598	6,940,844
U. of Washington	12	4,024,258	110,410	42,488	3,171,418	5,865,824
U. of Wisconsin	13	4,044,136	98,477	53,823	2,842,618	6,265,936
U. of Minnesota	14	3,870,712	56,390	43,651	2,545,691	6,670,078
U. of Br. Columbia	15	2,217,021	109,558	32,301	2,726,692	6,818,130
U. of No. Carolina	16	2,722,799	118,395	38,950	2,911,063	4,678,220
U. of Arizona	17	2,639,041	98,202	30,614	3,674,784	3,832,407
Ohio State U.	18	3,615,108	85,123	29,403	2,224,206	5,237,177
U. of Chicago	19	4,441,312	130,488	48,721	2,232,777	3,995,869
Indiana U.	20	3,856,121	96,918	26,462	2,799,242	5,040,146
Princeton U.	21	3,363,282	73,808	31,268	2,648,700	4,617,309
U. of Florida	22	2,231,509	68,527	44,112	2,897,884	3,865,691
U. of Pennsylvania	23	3,000,650	61,760	29,169	2,051,440	4,357,706
Pennsylvania St. U.	24	2,207,098	57,495	21,737	2,335,538	5,405,545
U. of Virginia	25	2,391,585	70,974	24,432	2,558,290	3,951,877
Rutgers U.	26	2,290,013	73,170	26,583	2,193,454	5,246,336
U. of California at Davis	27	1,681,545	75,279	44,084	2,798,138	4,725,310
New York U.	28	2,613,731	86,163	28,977	2,102,962	4,387,223
Northwestern U.	29	2,838,187	18,090	31,375	2,238,870	4,351,197
U. of So. California	30	2,105,389	69,819	30,766	2,236,454	3,999,372
State U. of New York at Buffalo	31	2,003,090	66,643	21,801	1,892,461	3,272,571
Duke U.	32	3,006,026	53,920	27,601	2,225,639	3,574,827
U. of Alberta	33	2,146,456	80,012	14,459	1,816,159	5,782,368
Michigan St. U.	34	2,707,779	93,731	20,090	1,848,294	3,598,687
U. of Georgia	35	2,062,499	76,853	32,413	2,253,589	2,966,976
U. of Iowa	36	2,356,096	60,830	28,234	2,591,725	3,204,700
U. of Kansas	37	2,214,824	66,373	27,796	2,268,756	3,331,246
U. of Maryland	38	1,472,031	68,463	16,737	1,965,580	4,009,298
U. of California at San Diego	39	1,426,747	47,792	27,629	2,021,583	4,341,351
U. of Pittsburgh	40	2,339,242	70,927	18,766	1,730,337	3,656,453
Virginia Polytechnic Inst. and State U.	41	1,285,615	59,578	23,114	1,851,220	2,398,304
Howard U.	42	1,159,411	43,015	21,194	2,677,650	4,172,076
U. of California at Santa Barbara	43	1,416,667	41,440	18,832	2,197,000	4,107,751
Syracuse U.	44	1,952,594	64,282	22,097	1,675,388	2,230,734
U. of Kentucky	45	1,816,782	24,734	34,204	1,773,131	2,609,478
Louisiana St. U.	46	1,884,656	62,030	19,378	2,523,571	2,535,346
McGill U.	47	2,068,383	63,798	15,300	1,583,709	5,570,603
Arizona State U.	48	1,527,021	58,371	18,371	1,983,121	2,604,606
Massachusetts Institute of Technology	49	1,844,451	46,828	19,593	1,335,824	3,061,527
Southern Illinois U.	50	1,666,953	36,128	20,015	1,769,921	3,006,981
U. of Missouri	51	2,068,788	52,141	21,379	$1,634,221	$2,381,550
Boston U.	52	1,347,343	32,601	23,440	1,661,003	2,624,192
U. of Cincinnati	53	1,287,691	39,106	17,900	2,372,272	3,251,141
U. of Hawaii	54	1,786,335	50,213	30,781	1,749,203	3,162,069
U. of South Carolina	55	1,894,264	66,824	16,809	1,716,334	2,335,999
Florida State U.	56	1,370,739	47,449	15,682	1,961,413	2,289,437
Washington U. (Mo.)	57	1,838,820	40,109	15,232	1,714,194	2,400,440
Washington State U.	58	1,265,979	34,255	29,900	1,339,622	2,803,579
Johns Hopkins U.	59	2,346,131	24,196	16,501	1,762,695	2,639,652
U. of Western Ontario	60	1,437,722	64,052	16,000	2,093,405	3,682,624
Purdue U.	61	1,468,805	43,909	17,755	1,630,768	3,065,969
Temple U.	62	1,641,057	48,208	15,531	1,533,356	3,005,658
U. of Nebraska	63	1,547,212	53,172	20,692	1,620,012	2,186,535
U. of Tennessee	64	1,392,009	35,640	24,166	1,465,859	2,311,658
Texas A&M U.	65	1,358,220	58,576	15,347	1,623,785	2,154,345
Wayne State U.	66	1,878,689	39,260	13,526	1,361,281	2,986,255
U. of Oklahoma	67	1,858,658	50,382	16,699	1,793,157	2,044,449
Brigham Young U.	68	1,523,507	59,289	17,319	n/a	n/a
Iowa State U.	69	1,401,520	51,611	18,615	1,655,289	2,319,190
Georgetown U.	70	1,284,346	43,183	17,842	1,593,940	2,927,592
Emory U.	71	1,641,141	46,821	14,782	1,760,746	2,129,263
State U. of New York, Stony Brook	72	1,272,783	45,976	17,774	1,559,802	2,432,972
U. of Rochester	73	1,745,000	45,000	12,500	1,500,000	2,234,000
U. of California at Irvine	74	984,797	45,785	13,558	1,891,629	3,026,078
U. of Miami	75	1,379,450	36,008	15,932	1,627,409	2,518,170
U. of Colorado	76	1,888,207	35,303	19,076	1,181,160	2,586,330
U. of Connecticut	77	1,689,508	57,572	15,304	1,597,073	2,640,566
York U.	78	1,329,396	56,845	11,833	1,452,808	2,939,472
U. of Houston	79	1,260,137	34,196	13,153	1,355,484	2,277,809
Vanderbilt U.	80	1,449,025	18,736	15,491	1,391,196	2,077,293
U. of Massachusetts	81	1,803,647	72,775	12,514	1,293,518	2,644,337
U. of Utah	82	1,990,000	39,944	14,600	1,212,493	2,270,723
Brown U.	83	1,709,261	37,847	14,871	1,251,646	1,345,109
U. of Oregon	84	1,502,404	28,046	20,000	1,274,319	2,283,658
Queen's U.	85	1,410,436	39,766	14,071	1,365,220	2,732,775
State U. of New York at Albany	86	980,464	43,600	15,297	1,353,414	2,032,581
U. of New Mexico	87	1,043,936	43,963	15,905	1,224,986	2,132,445
U. of Manitoba	88	1,217,053	36,282	12,450	1,251,021	3,116,055
Colorado State U.	89	1,278,162	45,239	16,641	1,016,568	2,098,683
McMaster U.	90	1,186,687	46,391	12,776	1,860,823	2,277,749
Dartmouth C.	91	1,433,938	43,221	18,234	1,325,349	1,623,912
U. of California at Riverside	92	1,033,177	52,924	14,403	780,924	2,540,467
Tulane U.	93	1,399,345	26,940	12,267	1,260,533	1,800,908
U. of Saskatchewan	94	1,038,148	38,010	10,184	1,421,536	2,290,273
Case Western Reserve U.	95	1,392,317	23,951	13,691	1,208,446	1,999,458
U. of Notre Dame	96	1,459,336	40,617	14,159	1,289,100	1,597,282
Rice U.	97	1,071,814	37,208	10,107	1,267,231	1,322,601
Kent State U.	98	1,396,885	44,793	8,694	820,679	1,869,524
U. of Guelph	99	1,238,575	84,036	8,792	1,266,033	2,068,178
U. of Alabama	100	1,170,644	40,356	12,685	1,327,485	1,418,205
Oklahoma State U.	101	1,277,829	24,777	14,011	1,043,851	1,215,313

† Libraries are not supposed to report figures for their branch campuses.
‡ Based on an index developed by the Association of Research Libraries for quantitative comparisons. The index takes into account volumes held; gross number of volumes added; microforms held; current serials received; expenditures for library materials, binding, salaries and wages, other operating costs; and number of professional and nonprofessional staff members.
* Figures for Canadian libraries are expressed in U.S. dollars.
n/a Data not available.

SOURCE: ASSOCIATION OF RESEARCH LIBRARIES

2-Step Process for Teacher Training Could Improve Schools, Boyer Says

NEW HAVEN, CONN.

Teacher-education and training programs must be strengthened and better students attracted to the profession if the quality of elementary and secondary education is to improve, says Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching.

The programs must include "solid training in academic subjects and early apprentice experience in the classroom," Mr. Boyer told a group of educators at Yale University last week.

He also recommended that teacher training and teacher certification, which college departments of education provide as a continuous procedure in most states, be separated into a "two-step process." Under that arrangement, he said, a beginning teacher who is certified upon completing a degree program would have to undertake an apprenticeship—at a beginning salary level—before receiving a teaching license from the state.

Mr. Boyer also recommended recertification, perhaps every five years, as a way to identify and retain competent teachers and "weed out" those who are incompetent.

Stressing that teacher education should not be a "one-shot process," Mr. Boyer said school boards "must realize that lifelong education is essential" for all teachers. Educators cannot expect "a teacher trained 20 years ago to prepare students to live 40 years into the future, with no policy of systematic continued education," he said.

To provide more competent classroom teachers, said Mr. Boyer, whose foundation is conducting a two-year study of secondary schools, colleges must find ways to attract better students to the teaching profession. He called reports of education majors' steadily declining verbal and mathematics scores on the Scholastic Aptitude Test "enormously disturbing."

Colleges must find ways to reaffirm the importance of the teaching profession and overcome "the disdainful attitude of many academics," he said.

Good teachers who are leaving the profession might be persuaded to stay if the field offered more "career ladders," he said.

Too many teachers are deciding that to "get ahead" in the field they must become counselors or football coaches, he said.

More teachers, he added, might remain in the classrooms if they could "move forward within the profession." —BEVERLY T. WATKINS

Universities Buying Fewer Books Every Year, Association Reports

WASHINGTON

University libraries are buying fewer books every year, the Association of Research Libraries reports, because of the rising cost of journals, magazines, and other serial publications.

In a five-year period ending last summer, spending by university libraries for serials increased by an average of 13.8 per cent a year. Spending for books and other nonserial publications increased by 4.2 per cent a year.

Despite the increased spending, the number of volumes added to the libraries' collections went down by 3 per cent a year.

Collections of serials increased by only 1.7 per cent a year.

The report is based on data from 90 of the 101 university libraries that are members of the Association of Research Libraries.

The latest edition of the association's statistical report shows that 32 per cent of the libraries' total spending in fiscal 1981 went for books, serials, and other publications, the same proportion as in fiscal 1976.

Serials took an increasing share of the money that libraries spent on acquiring materials, up from 46 per cent in fiscal 1976 to 58 per cent in fiscal 1981.

Copies of the report, *ARL Statistics, 1980-81*, are available for $8 each for association members and $10 each for nonmembers, from the Association of Research Libraries, 1527 New Hampshire Avenue, N.W., Washington 20036. —J.M.